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Action Research – Applied Research, Intervention Research, Collaborative Research, Practitioner Research, or Praxis Research?

Olav Eikeland

This article relates common ways of conceptualising action research as “intervention”, “collaboration”, “interactive research”, “applied research”, and “practitioner research” to a number of different ways of knowing, extracted from the works of Aristotle. The purpose is not to disavow any of these practices but to expand the philosophical, methodological, and theoretical horizon to contain the Aristotelian concept of praxis. It is claimed that praxis knowing needs to be comprehended in order to realize the full, radical potential in action research providing real “added value” in relation to more conventional social research approaches. Praxis knowing radically challenges the divisions of labour between knower-researchers and the known-researched. Thereby it also challenges both the epistemologies and institutionalisations dominating both conventional research and conventional ways of conceptualising action research.

Key words: action research, collaborative research, intervention research, practitioner research, *praxis*, ways of knowing

In this article I will address different ways of conceptualising action research according to how it seems to relate to its field or subject of study. Different conceptualisations do not necessarily imply radically different or incompatible practices. But despite practical similarities between action research schools and individual researchers, conceptualisations differ, creating some-

times fruitful tensions and sometimes confusion, partly because the differences may often be more terminological than really conceptual. Often the practices of action researchers are better than their conceptualisations of what they do. But these differences need to be discussed. Hopefully, the following contribution will help to clarify some conceptual and terminological differences and similarities that might decrease confusion, but at the same time increase fruitful differences and tensions.

Many action research approaches use terms like “intervention” and “collaboration” or “interactivity” in describing their ways of doing things and how they relate to their field of study, and / or they think of their activity as a form of “applied research”, applying either research methods or research results to interpret or guide practical development work. Among the “interventionists” we find people like Argyris (1970; 1985), Engeström (2004), Rapaport (1987). Traditions at the Work Research Institute (WRI) in Oslo and at the ISEOR in Lyon often talk about intervening, and so, of course, do explicit “intervention researchers” who normally do not call themselves action researchers but still have many things in common with certain forms of action research (cf. Rothman & Thomas, 1994; Fraser et al., 2009).¹ Others, like Greenwood and Levin (1998) emphasise some form of collaboration between researchers and practitioners, and so do many from the Norwegian WRI-tradition (B.Gustavsen and others) and in the UK within CARN (J. Elliott and others) and CARPP (P.Reason and others). Swedish researchers (Svensson, Ellström, & Brulin, 2007) prefer to talk about “interactive research”, while Eden & Huxham (1996) and others seem to prefer to talk about action research as “applied research”.²

Terms like these can, of course, have many different meanings in different contexts. Some are relevant, others irrelevant for action research purposes.

¹ Intervention researchers and action researchers have a common ancestry through quasi-experimental research and the action research of Kurt Lewin (cf. Campbell, 1978).

² Each of the contributions in this issue of IJAR have one of the approaches in my discussion as its point of departure; Shani, Coghlan & Cirella, the collaborative perspective, Savall, Zardet, Péron & Bonnet, the interventionist perspective, Schaenen, Kohnen, Flinn, Saul & Zeni, the practitioner perspective.

Although sometimes the emphasis is on one term more than on others, the different terms may, of course, be quite compatible and not in any way contradictory or contrary to each other. This could indicate that the differences are mostly terminological or simply designate different aspects of a complex practice. In action research and social research more generally, however, terms like these do presuppose a distinction between “insiders”, usually thought of as the practitioners immersed in the social field concerned as objects of change or study (organisations, communities, families, individuals, etc.), and “outsiders”, mostly researchers, consultants, therapists, educationalists, or social workers whose institutional base and primary practices are not defined as “existentially” enmeshed in the specific field of some *particular* “insiders”. Although generally defined in relation to *some* “clients” as “insiders”, the outsiders happen to collaborate with and / or intervene in the social world and practices of specific “insiders”. They come and go with limited change projects and methods. But still the outsiders’ perspective defines the terminology. Insiders and outsiders may collaborate in planning and implementing some form of change or problem solving project where normally and somehow the outsiders claim to contribute with applied research methods, scientific theory, or “results of research” in justifying their collaboration with, and intervention into, the lives of the insider practitioners or natives. This means, however, that there may still be many “othering effects” (Eikeland, 2006) connected to research conceptualised in these ways.³

Let me reveal at once that I am not quite satisfied with this way of conceptualising, or this terminology, if that is all there is to it. It tends to exclude, conceal, or even distort what I believe must be core elements and potentials in action research considered primarily from an epistemological, learning, and knowledge generating perspective, but subsequently and ultimately even from a practical point of view. It is important to note, however, that my scepticism does not imply that either intervention or collaboration or interactivity should or could currently (and maybe ever) be avoided. Current (and

³ This whole constellation is, of course, challenged by the fact that so many employees in “ordinary” work life have university degrees themselves, by the fact that all advanced work life enterprises are striving to become learning organisations which also do their own research (cf. Eikeland, 2009).

maybe even *any*) institutionalisation of research and knowledge generation makes them all unavoidable. Still, we need other ways of conceptualising action research and knowledge generation and application more generally; ways that are not dependent on the insider-outsider distinction and its implied divisions of labour.

More generally, there is a constant tension in modern mainstream social research between “theory” and “practice” that has to do with how institutionalised divisions of labour and corresponding research techniques and concepts frame and restrict our thinking *about* and our relationships *to* the field or subject of study. We are all, to some extent, positioned *within* and hence practical prisoners *of* extant institutions and divisions of labour. But although practically dominated by existing institutions and divisions of labour, we don’t have to let our thinking be imprisoned and dominated in the same way, quasi-essentialising the current segregations and divisions. Other, more implicit aspects of our common practice can be brought to the fore methodologically and theoretically. In order to conceptualise or theorise in ways that transcend both existing divisions of labour and corresponding attempts to mediate or “bridge” between the divisions and opposites implied without changing their basic relations, the discussion will be better served by taking as its starting point a more basic theory of knowledge, or gnoseology (broader in scope than epistemology) (cf. Eikeland, 2007).

Similarities and differences between terms and concepts of “intervention”, “collaboration”, “interactivity”, “application” and what we may think of as “development” (unfolding implicit, emergent tendencies), may be clarified by relating these concepts to different ways of knowing extracted from Aristotle, which I will present below (cf. Eikeland, 1997, 1998, 2006b, 2008). The philosophy of Aristotle provides other ways of conceptualising knowledge generation and application which are not dependent on the insider-outsider distinction and its implied divisions of labour. But the main purpose of this text is not to disavow “intervention”, “collaboration” and similar terms or practices but to provoke reflection and open the theoretical space for exploring *praxis*-research. These most commonly used terms just mentioned do not open this reflective theoretical space sufficiently, since they all seem to presuppose the institutionalised division of labour and do not incorporate

reflections on the Aristotelian concept of *praxis*. Hence, my text is a call for more distinctions and thereby more distinction in our thinking.

It is my claim, then, that it is both possible and desirable to do action research as *praxis*-research in ways that transcend “intervening”, “collaborating”, “interacting”, and “applying” mainstream research methods and scientific theory, as a dialectical “*Aufhebung*” of these terms and practices. A dialectical “*Aufhebung*” of something is not the same as simply leaving the transcended something behind, deconstructing, cancelling, and abandoning it. *Aufhebung* means transcending, retaining, transforming, and improving at the same time, literally; to raise something to a new level, mainly by recontextualising it. This can be done by rethinking these terms within a comprehended *praxis*-research framework.

Several forms of what is often termed “practitioner”, “native”, or “insider” research: where the tasks of knowledge generation and research are done by people from within the different vocations, professions, organizations, and practical pursuits themselves, seem to be on the trail of *praxis*-research, but often with insufficient philosophical reflection and sometimes apparently reducing the task of action research to problem solving and improving practice, without explicit and clear theoretical ambitions (McNiff & Whitehead, 2011). *Praxis*-research may require practitioner-research. But, still, not all forms of practitioner research qualify as *praxis*-research, as when practitioners merely apply conventional research methods (observing the behaviour of others, reading documents, and asking questions). Practitioner-research may be necessary but still not sufficient for *praxis*-research. As I have tried to clarify elsewhere, even *within* what might be called informed Aristotelian *praxis*-research there are important differences which, although there is no space for it here, need to be addressed.⁴ My presentation here may

⁴ My own reconstruction of Aristotle differs from the most current “applied” way of presenting Aristotle on knowing by separating *epistēmē* from *téchhnē* and *phrónēsis* (cf. Flyvbjerg, 2001; Toulmin, 1996a, 1996b, 1996c, 2001; Schwandt, 2002; Ramírez, 1995; Dunne, 1993; Polkinghorne, 2004). The separation is usually done in order to emphasize *phrónēsis* as an independent alternative to *epistēmē* and *téchhnē*, or to “science” and “technology”. *Phrónēsis* is seen as deliberation connected to *praxis*, interpreted as approximately our everyday activities, contrasted to science and technique. Often, rhetoric is also mustered as the deliberative rationality most appropriate for

be seen as an extension of the argument outlined in Eikeland & Nicolini (2011) as a call for more research done by knowers studying their own practice, not merely the practices of others, and not merely for practical purposes but even theoretical (in a certain sense).

Action research has a historical ancestry, broadly and coarsely in philosophical pragmatism (e.g. Greenwood & Levin, 1998), critical theory (Carr & Kemmis, 1986), experimentalism (Kurt Lewin), and political activism (Collier, 1945). Although it exceeds the frames of this text to do so, differences and similarities in ancestry between action research and quasi-experimentalism need to be clarified on the one hand, and between action research and political activism on the other hand. Differences between critical theory and pragmatism also need to be addressed (cf. Papastephanou, 2012). Simultaneously, the “internal” action research differences and similarities between intervention research, applied research, collaborative and interactive research, and native research need to be listed and discussed.

The different action research ancestries are “negatively” united in their dissatisfaction with a disengaged, contemplative, and / or spectator based concept of social science and with research feigning value neutrality and zero practical “reactivity”. “Positively” they are united in their demand for more practically conscious and relevant research versions. Although keeping a “critical distance” is often seen as a necessary premise for objectivity in much explanation and prediction, a common premise for the dissatisfaction is that doing research at a distance is insufficient, irrelevant, and even distorting and invalidating. But pure partisan research subordinating and restricting knowledge generation explicitly to what is immediately “useful” for some externally defined cause is hardly a viable alternative to disengaged spectator research. So, other forms and ways of attaining and maintaining “critical

everyday practice, in the attempt to transcend modern reductionist science. This interpretation is not mine (cf. Eikeland, 1997, 1998, 2006b, 2008). *Epistêmê* cannot be equated with modern science. There are differences both in kind and of degree only, *within* the Aristotelian *epistêmê*, and theoretical and practical philosophy cannot really be segregated the way these interpreters do. The concept of *praxis*, on the other hand, is much more specific than our everyday activities. It is also much more specific than most modern hybrid concepts of “practice”. But still different aspects of *praxis* must be distinguished even in its specialized Aristotelian sense. Cf. below.

distance” without externalised segregation need to be distinguished and developed.

For both relevance and validity reasons, then, a more engaged and involved research is promoted by action researchers. But it is worth reminding ourselves that the old experimentalism of Francis Bacon (1620), basic to modern natural science, shared the dissatisfaction with “contemplative” science, albeit mainly directed at a medieval scholastically insulated and speculative natural science. Even the behaviourism of the 20th century shares a similar dissatisfaction, however (cf. Lattal & Laipple, 2003; Marr, 2003). Many of the dissatisfied are simply interested in “what works”, or in what is immediately “useful”. In order to find out, they squeeze, bend, break, cut, stretch, and twist “mother nature” as recommended by Bacon, i.e. they interfere and intervene in natural processes and apply different treatments to detect cause-effect relationships, to really see experimentally “what works”. They search for results and recommendations like “apply x as a cause / stimulus and y will follow as an effect / response, apply a, and b will follow”, etc. Since most action researchers feel quite alien to both experimental natural science and behaviourism, however, it seems useful to rehearse and sort out how such dissatisfactions, in one way united against what John Dewey (1929) called “a spectator theory of knowledge”, still differ between themselves. Several contrary and even contradictory things may “work”, and they may work in quite different ways. There are many ways of inducing changes in people’s behaviour, not all of which are equally recommendable. Hence, there may be quite different ways for research as well to be involved, engaged, useful, or practice based and directed, engendering different kinds of knowledge, and with equally different ethical and political implications.

With Kurt Lewin, action research grew in the 1940s and 1950s from experimental and quasi-experimental social research as an answer to both validity and relevance challenges. John Dewey’s pragmatism and promotion of democracy was also an important source of inspiration at an early stage, still within an experimental interpretive horizon. Later, especially since the 1970s, political activism, critical theory, phenomenology and hermeneutics, feminism, and post-modernism have become prominent inspirational sources. Hence, over the years, it has gradually become increasingly clear that its

different ancestries have given rise to different ways of conceptualising and practising action research. What, then, constitutes the unity of action research, not merely “negatively” but “positively”? Although, over the last 20 years, action researchers have emerged as an international community of people communicating among themselves and “united” in what they are against (e.g. Reason & Bradbury, 2001), there are basic internal differences that need to be addressed and developed; differences that can still be contained as non-antagonistic.

The whole idea of intervention has a long history. Before the famous saying accredited to Kurt Lewin that “in order to understand something you have to change it”, similar ideas were held by Aristotle, Hegel, and American pragmatists, while the most famous and influential proponents of this idea have, of course, been Francis Bacon and Karl Marx. Most have somehow been inspired by modern experimental natural science as a starting point for the approach. But, as pointed out by Hanna Arendt (1958), inspired by Aristotle, and continued by Jürgen Habermas (1971, 1973) there is an important difference between “technique” and “practice” which is not reflected in the tradition springing from experimental natural science but which is centrally at stake in the different conceptualisations of action research⁵. I return to Aristotle below. While “technique” and “engineering” is associated with interventions, manipulations, and calculations, “practice” or *praxis* is different.

What, then, are the differences, overlaps, and similarities, and, since the terms are often used uncritically and interchangeably, what *ought to be* rightfully observed and established as differences or similarities between *intervention research*, *collaborative* or *interactive research*, *applied research*, and *practitioner research* or *native research*. For example, intervention research may be inspired by the profession of medicine (as clinical) or by engineering (as social engineering) and by experimental research. Different forms of collaborative research may be inspired by the emancipatory ideals of critical theory or by ideas of complementarity, interactive research by an exchange within clear and explicit divisions of labour, while others get their

⁵ Cf. the discussion between Herbert Marcuse and Karl Popper (1971) about social engineering and critical theory in the 1970s.

original inspiration from other parts of the action research ancestry. But, often, the differences are not clearly defined or understood, and sometimes people will identify with several or all the designations without realising or recognising any significant tensions or differences between them.

In my opinion, the differences between the approaches need to be clarified, better defined, and emphasised, *not* in order to produce unnecessary antagonisms but in order for us all to better understand what is being done and the different ramifications of action research and “practice oriented” research more generally. We need these differences (and others) in order to think clearly, and even in order to combine compatible approaches. In my mind there is no doubt that for different “practical purposes” and occasions, all the different forms of action research: as interventions, as collaborations, or as applied social research, may be necessary and can be justified. My purpose, then, is not at all to say that interventions, collaborative relationships, or ordinary research methods should be avoided or are insufficient for all purposes. Not even purely disengaged “spectator research” whether explanatory or interpretive, or explicitly manipulative technical research for that matter, can be discharged wholesale and uncritically for all occasions and purposes. In fact, modern societies make many different kinds of actions, knowledge, and research necessary in order to keep the social “machinery” going; and more often than not, we have to rest content with what is second best. Forms of knowledge and ways of knowing are closely and congruently connected to institutional and organizational arrangements. But that does not mean we have to conflate terms and concepts, or mistake one for the other to the confusion of all.

I will maintain that at the most basic and radical level, action research needs to be understood as a special kind of practitioner or native research to be clarified below; as *praxis* research. This is what really renders or could render “value added” from action research in relation to other approaches. At this basic level and in this form, insider, native action research represents kinds of knowledge that cannot be neglected or overlooked even by totally different forms of research. But although the differences between ways of knowing to be presented below cannot really or legitimately be neglected and overlooked, they often are, due to conceptual conflations and confusions; and

this negligence is part of our modern legacy. So, the different ways of knowing and forms of knowledge at stake need to be clarified and emphasised. The different forms of research presented above may all be necessary and profitable for particular purposes and occasions. But basic challenges concerning ways of knowing, knowledge forms, and their validity and relevance are normally not addressed and more often evaded and obscured by focusing too narrowly on so-called “practical purposes” and “usefulness” of research. It is my contention, then, that action research is not always and need not always be *only praxis* research, since it quite legitimately can be much more than just this. But *without* comprehending *praxis* it hardly qualifies as action research; it then misses the main point and can be reduced to other forms.

Hence, this article will suggest why and how, theoretically and epistemologically, understanding action research as a form of practitioner or native research, *praxis* research, based on practically acquired experience of the knowers involved, is necessary in order to overcome the deep split between “theory and practice” produced by a fundamentally contemplative, externalised, and spectator based epistemology and institutionalisation of modern social science, but also by technical approaches to action. Overcoming the split requires considerably more than *individual* and *proclaimed* changes in epistemology and methodology, however. It requires institutional, organisational, and practical changes in ways of doing things, individually and collectively. But logically, step one is to show how it is possible and necessary to utilise the practically acquired experience of the knowers involved for theoretical purposes, and that such experience is actually always already presupposed in all forms of knowing (cf. Eikeland, 1997, 1998, 2008). The challenge is to make this basic experience-dependency conscious and visible, and then to integrate it adequately into the self-conceptualisation and practices of action research and of social research in general.

By more adequately sorting the relations between intervention research, applied research, collaborative research, interactive research, and native research, it will become clearer how a radical practitioner, “insider”, or native action research challenges the modern institutionalisation of social research and knowledge production, based on invalidating divisions of labour in the production of social knowledge. But, as indicated, this challenge from radical

native ways of knowing does not only challenge modern social research from the outside. More significantly, it also challenges it from the inside, since “native ways of knowing” are subconsciously presupposed without being explicitly recognised, thematised, and reflectively integrated even within mainstream approaches to science. Mainstream researchers need to address their own implicit and presupposed “nativeness” (cf. Eikeland, 2006). By being thematised, however, the conscientisation of this core of native action research *inside* mainstream research can contribute to the transformation and improvement of mainstream social research. By mainstreaming action research in this way, the split can be transcended (*Aufgehoben*).

The radical foundation of action research in accumulated native practical experience needs to be expressed and transformed into practical measures, of course. This text does not allow me to pursue this fully, but I believe a broad and systematic development of organisational learning provides an important road ahead for realising this (cf. Eikeland & Berg, 1997; Eikeland, 2008a, 2012).

Ways of knowing – knowledge forms

Although I have presented Aristotelian knowledge forms and reasons for taking Aristotle as a point of departure before, I need to repeat (cf. e.g. Eikeland, 2006b, 2008, 2009). Many typical validity challenges in modern research methodology and philosophy of science are connected to specifically modern concepts of theory, methods, and experience (or “data”) and their institutional embeddedness. In order to solve or to dissolve the problems, these concepts must be transcended and transformed. In order to break the one-dimensionality of modernism, different ways of knowing need to be mustered and examined within a broader perspective on knowledge. I take the table below as my starting point for the following explanation.

Table 1 presents ways of knowing extracted from the traditional *Corpus Aristotelicum* (cf. Eikeland, 1997, 1998, 2006b, 2008).⁶ Differently from modern epistemology, Aristotle’s theory of knowledge is a gnoseology, explicitly multidimensional, non-reductionist, and relational where *epistêmê*

⁶ Cf. these works for references to the *Corpus Aristotelicum*

Table 1: Ways of knowing

Basis	Way of knowing	Associated rationality	English equivalent
<i>Aisthêsis</i> (perception)	<i>Theôrêsis</i> = <i>epistêmê</i> ₂	Deduction, demonstration, didactics	Spectator speculation
	<i>Páthos</i>	??	Being affected passively from the outside
<i>Empeiria</i> (practically acquired experience)	<i>Khrêsis</i>	<i>Tékhnê</i> (calculation)	Using instruments
	<i>Poiêsis</i>		Making, manipulating materials
	<i>Praxis</i> ₂	<i>Phrônêsis</i> (deliberation)	Doing: virtuous performance, practical reasoning
	<i>Praxis</i> ₁	Dialectics / dialogue. The way from <i>novice to expert</i> , from <i>tacit to articulate</i>	Practice, training for competence development and insight (<i>theôria</i>)
	<i>Theôria</i> = <i>epistêmê</i> ₁	Dialogue, deduction, deliberation	Insight

is split and takes a position among several other forms of knowledge. There is always a *knower* and something *known* involved, related to each other in specific and different ways that define ways of knowing; relationships that are also specifically required in order to acquire certain kinds of knowledge or competence. Certain relationships between means and ends specific to the different ways of knowing are also implied. As explicitly relational, the ethico-political implications of different ways of knowing are immediately brought to light as well, complicating considerably the modern ambition of keeping research “value neutral”. Ethics deals with relations between people, and the ethical aspects of the different relational knowledge forms, normally kept in the dark by modern ways of thinking, emerge when they are implanted among people; when some people know (about) others in the different ways presented below. The relational starting point also shows how the different ways of knowing are impossible to reduce to one basic form differing merely in precision along one dimension. The different ways of knowing are mostly independent from each other (but with some important overlaps), with their own ways of acquisition, and with their own validity criteria. Hence, *both* the modernist unity-of-science dream of transforming and reducing all kinds of knowledge to one basic form and level, *and* the “post-modernist” tendency to make all kinds of knowing indifferently valid or equivalent were alien to Aristotle. But his gnoseology allows for reconsider-

ing and reintegrating ways of knowing: traditional, practical, tacit, emotional, experiential, intuitive, etc., marginalised and considered insufficient by modernist thinking.

Theoretical and “scientific” ways of knowing

Table 1 presents two concepts of theory and *episteme*, normally, but not quite adequately translated as “science”, one at either vertical extreme. In spite of fundamental differences, they share similarities making them both *theoretical* in an Aristotelian sense. They are both theoretical because the principles of movement, change, or development in the subjects studied reside in those subjects themselves, not in anyone or anything external to them. Things studied theoretically move, change, and develop by themselves, not because or as some external knower or manipulator makes them move or change. They move, change, and develop *naturally*, not artificially. We might say that the theoretical attitude is to respect the nature of what is studied. An Aristotelian theorist, then, is interested in knowing and understanding things “in nature” and “according to their nature”, without artificially altering them. This aspect unites both forms of theory, and separates them from the table’s intermediary non-theoretical knowledge forms. Still the two forms of theory should be kept apart.

Theôrêsis

The first form, called *theôrêsis* or *epistêmê*₂, is based on non-intervening observation at a distance. *Theôrêsis* relates to external objects separate from the knower. It is based on *aîsthêsis* or sense perception, or, rather, on a *combination* of knowledge from different sources; i.e. perceptual knowledge input (“data”) and knowledge from other (interpretive) sources producing educated conjectures (“theory”). The knower projects preconceived concepts and theory on to externalised observations, in order to predict or interpret movement, change, or behaviour in the objects observed. The relation implied between knower and known is one of difference, distance, non-interaction, and non-interference; sometimes because interference or inter-

vention is impossible (as with remote stars) but equally often justified by the intent of studying things as they are naturally, in themselves, on their own.

The intellectual movement, thinking, “down” in the *theôrêsis* model, *from* theory *to* “data”, experience, or practice, is primarily formal and deductive. In its deductive form, mathematised astronomy and physics have served as paradigms. For social and historical reasons (i.e. the rising success and social prestige of natural science), this paradigm gradually conquered the whole field of epistemology, science, and research from the 17th century on. Attempts at modelling knowledge generation in most fields on this example, have formed the institutions of modern science and research quite fundamentally. Because of its status as basic scientific paradigm in the modern period, almost all philosophy of science and research methodology has made *theôrêsis* under different designations (like “covering law”, “hypothetico-deductive” method / HDM) its starting point and framework (cf. e.g. Hacking, 1983).

Even interpretive or qualitative social research remains mainly within modified models of *theôrêsis*, although it normally does not formalise its theories and has long since expanded the repertoire of data collecting techniques to include interviewing or questioning in different forms, generating “reactivity-“ or “interactivity-“ challenges (difficult to control) in its wake. In this model, the people studied by social research are still the *others*, not the actors-knowers themselves. The people active as knowers are the segregated researchers. The people studied and known are not active researchers or knowers in this relationship, hence the practices studied are not the knowers’ or researchers’ own practices but the others’. In order to approximate *theôrêsis* conditions and achieve this distant relationship conforming to its models, mainstream social science has resorted to an artificial separation of knower and known (disengagement) and an objectifying externalisation of the known. Although difficult to maintain, in these relations it is important not to intervene and disturb, and to neutralise any unintended effects (reactivity disturbing “natural activities” and distorting results) of the research activities.

Although usually insufficiently separated from the other form of theory in table 1 (hence confusing and conflating the two, often throwing the baby out with the bath water), criticism of and opposition to this *theôrêsis* form of

theory and theoretical science is what unites most forms of action research and experimentalism. But keeping the two concepts of theory analytically apart makes it possible to avoid wholesale theory-scepticism and –rejection. It becomes possible to stay critical of this *theôrêsis* kind of theorising while retaining the second form below (*theôria*). Mainstream social research, however, in mostly abandoning experimentalism and action research and basing itself merely on reading, observing, and questioning, has remained within this broad ideal of uninvolved and intentionally uninfluential theory and science.

The experiential base for *theôrêsis* is registered collections of “data” as bits of information or observations taken at face value. Its relationship to “data”: collecting them without influencing them, is non-critical and non-interventionist. There are, of course, many quite basic discussions complicating the simplistic concept of “data” used by *theôrêsis*, which every data-collector should know but which cannot be dealt with here (cf. Eikeland, 1985, 1995, 2006). The point here is, again, not to ban “data” from other forms of knowledge generation but just to emphasise that “data” represent one specific and limited form of experience, historically and principally springing from and connected to a specific and limited model of science (cf. e.g. Bonss, 1982).

Generating theoretical explanations, moving “up” from “data” to theory, within *theôrêsis* is somewhat mystical and creative. Strictly inductive approaches (enumerative) have been abandoned logically since David Hume, and the abductive strategies (suggested by Ch.S.Peirce) attempting to make “inferences to the best explanation” have hardly advanced beyond educated guessing (conjectures). But according to Popper (1980) it does not matter from where and how you get your explanatory theoretical ideas. Theories are always hypothetical and merely required to provide falsifiable models (mathematical, graphical, physical, or linguistic) that may explain the data, i.e. predict the behaviour of the observed phenomena or events by deriving them logically from a theoretical scheme. The explanatory principle really consists in “saving the phenomena” instrumentally, by reducing or assimilating the data or *explananda* to an *explanans* or *interpretans* as something already and better understood, subsuming the data under theory as singular instances of something more general. But the real challenge of “theory plural-

ism” indicating how an endless number of hypothetical theories (true and false) might validly produce (i.e. “explain”) a specific set of data as results, is not solved.

Theôria

But, with Aristotle, *theôrêsis* was not the only model for *epistêmê*, that is, for knowledge that was stabilised and pretty secure, about subjects that were for the most part or always stable and regular themselves. At the lower extreme of the table we find the other *epistêmê* form, which in certain ways represents the extreme, opposite knowledge form to the first. With Aristotle, not only what we normally consider sciences were forms of *epistêmê*. Boxing, music, grammar, orthography, medicine, and other skills and disciplines were also called *epistêmê*, because there was a certain patterned stability and regularity, a certain discipline, in what they represented. But *this* patterned regularity is different from modern “laws of nature” and their derivatives.

In line with both Aristotle and Wittgenstein (1974), we may use grammar as the paradigm example for this other kind of *epistêmê*₁ or *theôria*. *Theôria* translates as “insight”. In grammar the *relation* between the knower and the known is quite different from the corresponding relation in astronomy. Grammar is basically about ourselves as native speakers, proficient practitioners, of a language. It expresses and organises certain aspects of our linguistic practice; the more or less stable forms and patterns that repeat themselves in certain ways in our performance. Grammar is descriptive and analytical, but it is also normative, since it sets standards for correct speech and writing, describing topographies of language use. The *basis* for grammatical knowledge is not primarily hypothetical conjectures about artificially collected singular “data” of sense perception observed from the outside and at a distance, but the practical competence, or patterns and structures (forms) in the acquired practical experience of the knower herself. Grammar primarily describes and analyses the linguistic practice of the knower, not that of strangers as “the others” known *only* or primarily observationally (as the stars) through collections of singular “data”. It is based on practically acquired *empeiria* (= *Erfahrung* as accumulated practical experience exercised /

habituated into us, not *Erlebnis* as merely momentary experience); simultaneously descriptive and normative in the same way as grammar. There is no distance or separation between the knower and the known here, as there is between the researcher and the heavenly bodies in astronomy. In some sense, we are internal to grammar, or grammar is internal to us.

This means that the subjects studied, our own forms of practice, must be extracted and “reified” reflectively in order to be grasped. They are not really outside us or outside our practices at all, the way stars are, and the way external nature is in general. In grammar, the knowers and the known are really the same. Hence, principles (common patterns, forms) of movement, change, and development still reside in the known (as required for theory); but *also* in the knower, simultaneously since the knower and the known coincide.

In the astronomical *theôrêsis*, the principles of movement, change, and development are in the objects known (they move and change by themselves), but still outside the segregated knower (who, therefore, must project explanatory models and metaphors as conjectures on to the known as *explananda*). As I return to below, the table’s in-between forms of *khêsis* (using) and *poiêsis* (making) relate to external or externalised objects, as does *theôrêsis*, but not merely at a distance from a non-intervening spectator position. *Khêsis* and *poiêsis* intervene actively in external objects as instruments / tools used or as material formed respectively, making tools and materials move, change, or behave artificially. Hence, their “artificial” principles of movement, change, and development are in the knower (as user or manipulator), but *outside* the known.

Grammar coordinates aspects of our practice, and all language users, the practitioners, have the same relationship to grammar. We may be novices or experts in using the language and at different levels of tacitness or articulation of the common forms. Our degree of initiation and expertise in a practice differs. But as practitioners and performers of an art, we have the grammar of the art or competence in common as performance standards we relate to. We relate to the grammar of our spoken language in the same way and as equals. Knowledge forms like grammar organise and structure the competence of their carriers, within a certain field or in general, and become primarily a qualification of their carriers themselves, individually and collectively. They

produce a specific *habitus*; a “grammatical” *habitus*, if you like. Collectively, they generate cultures and come to represent our culturally created “second nature” more and less habitually stable and regular.

Praxis

Grammar also exemplifies what in table 1 is called *praxis* knowledge, where the relationship between the starting point, the means, and the end or objective of our actions is one of formal equality. As in playing an instrument or in dancing, what we do as novices, what we do on our way to perfection, as means, and what we do as perfected virtuosos are all formally the same. The end or objective is entailed in the activity itself as its own perfection, making it autotelic (meaning: carrying its end or *télos* within itself). Hence *praxis* forms as activities, are in a sense, endless. *Ars longa, vita brevis!* As activities they are not merely formally different and limited technical means for external and separate ends, inserted between a starting point and an end point and stopped or put aside when the formally different aim is achieved. In *praxis* there are no technical or instrumental “methods” or “tools” formally different, delimited in-between, and separate from the starting point and the end. In perfecting a practice or in attempting to perform virtuously (as in acting courageously, fairly, or honestly), the aim and end is carried with and inside the activity. We dance or play our instrument all the time, all the way, but (hopefully, and preferably) we do it gradually better over time, even without ever becoming perfect. The general form of the activity, getting *into* the more or less perfected form, emerges as *habitus*, experience, and skill as we practice. Extracting and grasping the form or pattern in the practice constitutes the emergent concept.

This, then, represents genuine *development* as unfolding implicit (potential), emergent forms and tendencies, different from instrumental and technical modern “practice” causing artificial changes in external(ised) objects as *khṛêsis* and *poiêsis*. *Praxis* knowledge is the primary base for *theôria*. In contrast to *theôrêsis* (and to both *khṛêsis* and *poiêsis* as well), *praxis*-based *theôria* is knowledge shared in common between thinking individuals through language. *Praxis* is shared or shareable as *theôria*. There is by defini-

tion no *praxis* in relation to unthinking, non-sharing external or externalised objects, living or dead. Knowledge based in relations like these, even when inserted between human beings, of course, is transformed into and reduced to *theôrêsis* (spectatorship=speculation), *khrêsis* (use) or *poiêsis* (making, manipulating). *Praxis* and *theôria* is what is shared among communicating and equivalent minds, between colleagues as masters and apprentices, within cultural, professional, or republican, citizen (political) communities.

Praxis, then, is insider, native, practitioner knowledge. For Aristotle, *praxis* knowledge represents a relationship between colleagues sharing common standards for how to go about their professional activities. But our common and equal relationship to practical standards even sets an ethical standard for practical political communities of equals, as it did in the ancient *pólis*-communities (albeit among adult native men only, but today we can delimit such communities of equals differently). Equally important; it sets a standard for a social and political science very different from one based on *theôrêsis*, and from varieties based on technical interventions applying simple cause-effect relations. *Praxis* could and should also be explored as a gnoseological paradigm for a different form of organisational science, based on reflective practitioner research where the knowers-practitioners study and develop their own practice and common standards working as collegial coordinating principles.

As indicated above, quite different things may all “work”. For example, human beings, or parts of totalities more generally, may be coordinated in quite different ways. The Aristotelian *praxis*-based *concord* or *homónoia* as being “*practically* of similar minds” sharing common understandings, consisting in and created through *lógos* or reasoned speech not only in face-to-face relations but within large linguistic and conceptual communities, seems to be ignored when social co-ordination is attempted reduced to secondary “mechanisms” like markets (trading and bartering), hierarchies (power) or networks (loyalty alliances) by Thompson et al. (1991).⁷ *Praxis* knowledge regulates, or organises, the relationships between equals. It constitutes and requires a “we” of peers, literally as a

⁷ Cf. Eikeland (2008a: 399ff.) on “concord” or *homónoia*.

community with common standards of conduct and excellence and a common practical mastery and understanding (as in grammar), and it regulates relations among “us”. All those with an equal practical relationship to,— i.e. striving to realize, articulate, and understand, the common standards make up the relevant “we” as a community while any thing or anyone who is “not one of us”: clients, tools, material for change, etc., is treated according to different standards.

Methods – dialogue and *phrónêsis*

Modern research methodology is a discipline like other arts, vocations, and professions in the sense of being a certain practice in which ones performance can improve by practice, guidance, and reflection approaching some common standards of conduct. As I have tried to indicate in other places (e.g. Eikeland, 2006), the modern discipline of research methodology must be understood basically as *praxis* constituting common knowledge for the insider natives within the community of research practitioners. Methodology as a discipline develops and refines the professional / vocational competence and insights of the researchers, in principle similarly to how other professions or communities of practice develop and refine theirs. *Praxis* thereby becomes positioned as an albeit mostly tacit core even of mainstream research. Like every vocation or profession, research has its ways and methods of initiation and performance through methodological competence. Other vocations and professions could and should actually imitate the articulateness of research methodology in developing their practice and understanding.

What, then, are the *methods* of the discipline of methodology, how does methodology work; how do we improve our practice, insight, and discipline, clarifying, defining, and approximating standards of conduct and excellence, and how do we initiate novices for that matter? My contention (cf. Eikeland, 2008c) is that methodology as a discipline develops in ways similar to the methods of native or practitioner research and philosophy. These are basically the same (merging philosophy, methodology, practitioner research, and empirical research).

For both Aristotle and Plato, moving “*up*” or “*in*” to an articulated insight in basic principles (common patterns, forms) of grammar or of any other fields of activity we relate to in similar ways, starting as novices and/or *from* how things appear to us phenomenologically here-and-now, goes through practice based critical dialogue or dialectics, sifting and sorting, gathering and separating (cf. Eikeland, 1997, 2008). By searching actively and critically for patterns in how we do things and how to do things competently, comparing and sorting similarities and differences in our accumulated practical experience (*Erfahrung*), and in how we use language in specific language games (Wittgenstein, 1953) and / or communities of practice (Wenger, 1998), dialogue helps articulate what we carry with us as habituated tacit knowledge: our *habitus*. It also helps us on our way from novices to experts and to virtuoso performers. It helps the forms or patterns of our practices emerge in us and for us as it helps us perfect our practice, both in initiation and in exploration and inquiry.

This dialogical articulation from within practice and practical experience is what is called *praxis*_I on the second lowest row in the table. It is *inductive* in a wide and non-enumerative sense, sifting and sorting similarities and differences “bottom-up” in acquired practical experience and ways of knowing, developing and distinguishing inchoate perceptions, unskilled fumbling, and mere habits into skills and insightful competence. Dialogue is a form of *praxis* in itself, *common* to all other forms, even to the knower side of the split non-practical knowledge forms in the table (e.g. among colleagues of spectators or manipulators). Our own practices, as with grammar, we articulate and make explicit as reflectively extracted and abstracted patterns and forms from the inside out, as natives from inside the phenomena, as generators of phenomena. Hence the way to principal insight is not mystical here as it is with *theôrêsis*. It goes via the gradual and practical development of habits, *habitus*, and emerging experience into virtue or virtuosity, mastery, and to insight or *theôria*.

Critical dialogue needs relief from immediate pressure to act, however. The articulation of emerging insights is a task of its own in need of *leisure* from the exigencies of immersion in substantial practices. Leisure is *skholê* in ancient Greek, the word that afterwards became “school” in most European

languages. But the original *skholê* was not an ordinary school as we moderns normally understand it, independent and mostly segregated from practical contexts. It was primarily a space for reflection interspersed in practical contexts constituted as necessary breaks for practitioners. It was neither a didactic *didaskaleion* for instructive teaching nor an external observatory or “*theôretêrion*”. Thus, *skholê*, in its original sense at the beginning of the European intellectual endeavour (imported from the practice of craft communities), as a reflective relief from immediate immersion in some practice for “bending back” and grasping its form and pattern, provides an alternative “critical distance” from within practice for reflective reification of patterns in our own practices through critical dialogue, not as an external and segregated observatory for outsiders (non-practitioners / spectators).

In *theôria*, the thinking way down and out from “theory” to “practice” is also different. With grammar the practical enactment is often spontaneous in fluent and proficient speakers. We usually do not think twice before speaking, and we sometimes act as if we were merely acting according to given rules, recipes, precepts, and prescriptions. But mechanical, machine-like and inconsiderate, rule-following is not proper *praxis*. *Praxis* is defined in relation to its own internal standard of perfection (as skill and performance), maybe never or only momentarily fully attained in concrete action. In other more complex fields where the practice is not equally standardised and “automated”, for example in ethics, the “application” of general competence or knowledge of principles provided by virtues like justice, courage, friendliness, and honesty, needs discretion and deliberation, i.e. practical reasoning or *phronêsis*, trying to find out how to act in the most just, fair, or reasonable way towards someone here and now. There are no fixed rules or precepts for knowing when the *kairos* or right moment arrives and for exploiting it in hitting target in action, acting for the right reasons, at the right time, towards the right people, in the right way, taking all things relevant into consideration. Core areas for *praxis* need deliberation in action.

In order to realize itself as *praxis*, then, practicing for perfection needs to be more than just drill. It needs critical dialogue and *skholê* on “the way up”, developing *from* the incompetence of novices and unanalysed particulars into general competence and professional understanding. On “the way down”

from acquired competence, “applying” or enacting it performatively, it needs deliberative *phrónêsis* for the proper discretion and consideration of particulars. This way down is what is called *praxis*₂ in table 1. Hence, the transition from *theôria* to practice within this kind of knowledge is *not* deductive, nor does it go by some form of application of merely material and efficient causes and technical calculation of effects. It is, and was intended by Aristotle to be, deliberative, clarifying ends, reasons, and justifications for communicating minds (peers, colleagues), not rigorously deductive or calculative based on strictly formalised knowledge and simple efficient causal connections.

Intermediate, technical ways of knowing

Praxis, then, is not primarily defined in relation to external products, to material, or to instruments but in relation to internal standards of conduct for an activity. Although there is a *praxis* aspect to all the other forms in the table as well (since they are all constituted as communities of colleagues or of practice living in the span between fumbling, inchoate beginners and perfected virtuosos, between initiation, reflection, and performance), the other forms are all in different ways defined primarily in relation to separate external objects. *Khrêsis* is competence in using external or reified objects as *instruments* or *tools* for the user’s purposes without any intention of changing the instruments themselves. It is an independent competence, as for example in driving a car. Car-driving is not a vague, insufficient, or applied form of some basic science in astronomical form (*theôrêsis*). In order to become a good driver, you do not need any of the other knowledge forms first. You do not have to be able to build or dismantle a car, nor to understand the principles of a carburettor engine or even more basic laws of physics. You need to practice in the specific relation as a user of this specific kind of thing.

Khrêsis, or use, may not illuminate the most common concepts in current action research since most projects do not have such an instrumental relationship to its field of study. But *khrêsis* is still possible and even prevalent in human relations. Some are even very good at using other people as instruments for their own purposes (work life is even based on it through the

institution of wage labour). But *khêsis* relations among human beings constitutes a fundamental difference between users and used, and the ethics of using other people as instruments for achieving your own objectives is hard to defend *generally*.

Poiêsis, or making, does relate directly to what is at stake in action research, however. It is competence in manipulating external objects as *material* according to the manipulator's own plans and intentions, forming them and making something out of them. In *poiêsis*, movements and changes in the external object depend on us as knowers-manipulators. The change is not natural. The knower makes the changes according to preconceived plans in the knower's mind. Hence, *poiêsis* clearly *intervenes* artificially in its material, "going between" what would otherwise and "naturally" have happened to it. It creates or produces something from a material that depends on external intervention. The product or result would not otherwise come to be. Trees do not become chairs, paper, or books naturally. A chair is made when a carpenter intervenes in the wood making changes according to his concepts and plans. *Qua* carpenter he is only interested in those aspects of wood relevant for making houses, tables, chairs, and other artefacts from it. His interest is not theoretical, and he needs very little botanical theory in order to become a good carpenter.

But when such *poiêsis* relationships are transferred and inserted into human relations, they do not always look as attractive. As with *khêsis*, the art of changing and manipulating others is hard to defend ethically on a general basis, although some people are good at it. The art of medicine is clearly an ethically justifiable case of *poiêsis* or intervention in relation to the human body aiming at correcting nature gone astray; restoring health. But as an art of rhetoric, persuading and seducing, *poiêsis* is also sold to business executives as techniques for making people do what you want, see things your way and support you, and work with you not against you etc., very useful e.g. in motivating employees and organisational members for implementing top-down organizational changes. This, of course, indicates that intervening in human affairs has ethical aspects that must be considered, and conventional research ethics does so by requiring informed consent from research subjects. But the important point here is that this whole complex cannot simply be

reduced to a question of putting extraneous ethical constraints on technical and manipulative knowledge. It concerns kinds of knowledge and ways of knowing, carrying relational ethical or unethical import in themselves.

Both *chrêsis* and *poiêsis* are based on technical calculation of effects in instruments and materials for reaching the aims of the actors. Their articulation is *tékhnê* or “technique”. It works independently of any understanding by the ones subjected to treatment. When a specific cause is applied, certain effects can be calculated to follow. Technical relations can be mechanized through technology. Both *chrêsis* and *poiêsis* relate to external things, even to human beings in organisations, communities, families, and as individuals as external objects, as tools or instruments for use or as material for manipulative “making” or “conditioning”. Both *chrêsis* and *poiêsis* employ means (instruments, tools) that are different formally and in kind both from the starting point and from the end or objective of the act. Both have their aims in a product outside the technical activities in themselves. Unlike *praxis*, they are both heterotelic, meaning that their end is a separate object, state, or objective presumably achieved when using (formally different external instruments) and making (from external material) have stopped. Although modern jargon tends to conflate all of these terms confusingly into “practice”, this makes *chrêsis* and *poiêsis* different from *praxis* in important ways. But good or adequate “practice” is not simply “what works”. As indicated above, many different things may work, and they may work in quite different ways.

The conventional *experiment* in natural science is clearly a variety of *poiêsis*, that interferes and intervenes in natural processes in controlled ways and applies different treatments in order to detect and clarify cause-effect relationships (cf. Hacking, 1983). It intervenes consciously in whatever it studies by applying presumed causes in order to produce effects. Although in a scientific experiment, the point is not really to reach specific manipulated results but to generate general knowledge, the *kind* of knowledge generated is of a *poiêsis* kind, in *habitus*-conformity with manipulative purposes, i.e. applying specific causes as stimuli to produce specific effects. A fully fledged discussion of this is beyond the scope of this text, however, since it requires a broad discussion of different kinds of causes. It is a well known historical fact that modern science started by focusing almost solely on what

Aristotle called the “efficient cause” (immediately preceding and releasing an effect as with one marble hitting another) and discarded the others (material, final, and formal causes). In human relations efficient causes are often reduced to “external” causes (pushing and pulling, using “carrot” and “whip” as reward and punishment) providing treatments as if they were medicines that work without requiring or involving any adequate understanding of the causes (i.e. of what is happening to them) by the receivers of treatment. The treatment works even for those who don’t understand why and how? This one-dimensional causal focus is basically continued in the quasi-experimental tradition from Campbell (Cook & Campbell, 1979: 25-36). But professional competence and mastery does not work without the practitioner understanding how and why.

Apprenticeship learning as *praxis*

Skills, virtues, and professional disciplines, either individual or collective, e.g. skills in research methods, can hardly be produced by material and efficient causes like those above. Can novices be initiated into a professional or vocational community or community of practice by means like these alone; stimulated, motivated, manipulated? Can people achieve the responsible, independent, and autonomous thinking and acting of “*Mündigkeit*”, presupposed by every modern legal system, merely by being conditioned through external means like these? It is really a contradiction in terms. What has been said above about *praxis* reintroduces *final* causes, and even more centrally; *formal* causes to theory (*theôria*).⁸ As indicated above, “native ways of knowing” are subconsciously presupposed without being explicitly recognised, thematised, and integrated within mainstream approaches to science. I have argued elsewhere (Eikeland, 2006c) that the relationship between researchers and practitioners in relevant fields of study could and should be modelled on a dynamic relationship between masters and apprentices (already alluded to above) not on a static complementarity comparable to the relationship between parts of a machine or a jigsaw puzzle, or between

⁸ Cf. Eikeland, 2008 for a fuller treatment

fixed roles in a social system, not on a relationship of manipulating external objects (*chrêsis* and *poiêsis*), and not even on a didactic relationship of instruction. This dynamic master-apprentice relationship is already implicitly present in the well known action research and action learning cycles of reflection and action. Who, then, are masters, and who the apprentices?

In a relationship like this, field participants (communities, organizations, families, individuals) are not external moving objects to be described, predicted, and explained, nor are they material to be formed and changed, or instruments to be used, nor are they strangers to merely visit and report “back to base” about. Nor are they partners in a team with merely specialized, partial, and complementary roles and tasks. All of these relationships are possible, of course, and in certain cases quite legitimate. But becoming a member of a collegial community of professional, vocational, or cultural practice requires a process of initiation into a common and shared universe of the autonomous mastery and independent knowledge and understanding needed in order for individual practitioners to perform competently in specific situations. If theory and practice, thinking and doing, reflecting and performing, are to be united, the same people must participate in both, in alternating, cyclic, phases and levels of the same process, as in action research cycles alternating between reflecting and performing within open, experimenting, collaborative, research processes. Masters and apprentices go through the same initiating processes over and over, together, bringing them all closer to mastery through practice and through a learning, inquiring dialogue. The master-apprentice relationship must be a dynamic learning relationship based on full sharing of knowledge and competence, because it is designed to make a master of the apprentice.

Although masters might teach systematically, instruct didactically, and “give orders”, most exchanges between masters and apprentices have to be more dialogical, based on questions and answers explicating what is going on and being done, how and why, here-and-now, in practice⁹. Masters and

⁹ As a normative standard for learning relationships, apprenticeship implies more than the “undesigned” legitimate peripheral participation (LPP) and “learning-by-hanging-around” of Lave & Wenger (1991). It needs the consciously designed reflective *skholê* as a precondition for critical, *praxis*-based dialogue.

apprentices share common standards for what they are doing, striving to attain the same general ends concerning mastery. Their performances and skills are at different distances in different directions from realising them, masters closer, apprentices farther away. Where you are, practically, in relation to standards of performance and the ability to articulate them, decides whether you are a master or an apprentice, not fixed formal positions, titles, or distinctions. Within this relationship, the master is the servant of the other's learning; a facilitator or catalyst of the other's learning. If an unequal relationship is petrified as part of a social structure, it becomes static and conservative. But apprenticeship is not necessarily part of an unchanging, hierarchical, social structure as were the old apprenticeship institutions. Qua learning relationship it cannot be, since formally locked positions of authority and subordination are detrimental to the "masterly" autonomy to be learned.

Hence, the core learning relationship comes more appropriately to its own when liberated from fixations to social structure and status. Both the dynamism and the commonality within it are emphasised when underscoring that the role of master and apprentice is not formally determined nor permanently allocated between participants. It changes and alternates continuously. It rotates, increasingly as advanced levels are attained and a community of peers emerges. Everyone involved in the relationship are on their way, at different places along the same or similar way, changing, moving, and transforming, approaching the same or similar standards of performance through practice and critical dialogue generating insight and understanding. In such a liberated apprenticeship everybody's prejudices are on trial all the time, through a searching and inquiring dialogue, as Plato's Socrates pointed out a long time ago. Those who know the most and best in practice, or those who provide the better arguments, are "masters". Authority, roles, and tasks are not predetermined.

In building capacity for organisational learning in organisations (as a development task), the objective is to transfer and re-locate analytical research and learning skills to the others, but not merely didactically (cf. Eikeland & Berg, 1997; Eikeland, 2008). The apprentices must be fully initiated into all the "secret" tricks of the trade, although through several stages and levels. All other relationships, modeled on other relational ways of knowing stop short

at the threshold of fully initiating people into mastery of any art or discipline. But there cannot be a permanent division of labour. An apprentice does not have a partial or complementary role. S/he is on the way to mastery, as is the master.

As indicated above, though, most research practices are still forced to work within given institutional divisions of labour between roles as “insiders” and “outsiders”. How could professional researchers be “masters”, while the natives are apprentices, without reproducing verbally or practically the pitfalls of separate institutional roles and technical team-work divisions of labour, of externalised technical and instrumental relationships, and of didactic, top-down instruction? Presumably, researchers know the pitfalls of methodology and philosophy of science as well as the reflective methods of methodology. The general aspects of observing, questioning, and experimenting (trying out things) are things all practitioners observing and categorizing need to know in order to act competently. It is part of any reflective mastery’s competence. And so is the critical dialogue needed to articulate and externalise patterns in practices. Masters and apprentices are members of the same community of inquiry. Since not even masters are perfect, the common way of progress constitutes the community, i.e. they all have the learning and inquiring way of relating to their own practices and to each other, in common. An apprentice is a trainee, and we are all permanently apprentices, but alternate as masters. The common way of developing an emerging mastery constitutes the real community.

Hence, a group of “masters” and “apprentices”, released from being part of a social structure, is a group of peers, and a community of inquiry (Torbert, 1976). Participants may have complementary fields of activity and expertise, substantially different. Still, in the way of researching and inquiring into these complementary experiences, the specific processes and activities of inquiry, they are still peers; similar or alike. Experts in processes of inquiry are masters some times, having a greater knowledge and awareness of pitfalls of methodology and reflection, while experts in substantial arts or fields of activity are masters at other times, carrying in their own embodied experience and *habitus* the criteria for deciding the appropriateness of emerging conceptualisations.

The merging of research processes with practices, and the open sharing among participants in the inquiry, is also what constituted action research in the forties, perforating and breaking down the distinction between researchers and researched. The aim of becoming like the other (master) in certain respects (skills, knowledge, and understanding) is what constitutes apprenticeship. It is by exploring and developing these relations that the relationship between “researchers” and “practitioners” can become a *praxis* community. Grasping and comprehending one’s own practices individually and collectively as knowers-actors, improving one’s practices individually and collectively, contextualizing one’s practices, and articulating it all as *theôria* and more adequate and wider understanding, is not intervening technically, creating artificial changes by applying external causes. It is more appropriately called development, more similar to a therapeutic non-intervention against subjects, protecting them against interferences and interventions from obstructing surroundings and extraneous influences. Extraneous obstructions and influences intervene as efficient causes. Bringing our own practices to consciousness, making us see things previously invisible, in order to perfect them, does not.

Unfolding developments and emerging patterns differ from interventions, then. They approximate the Aristotelian relationship between *praxis* (doing something), and *eupraxia* (doing it well). A sprouting bud or blooming flower does not intervene into its former way of being. It fulfils it. Stopping the bud is intervention! Masters provide practical forms as elucidations of a model. Apprentices approximate and train themselves into the same form or pattern by imitation, experimentation, dialogue, and supervision, not striving to become identical to a particular master but to what “shines through” the masterly practice. The form or pattern of a common standard, “*die Sache*”, “*saken*”, or the “what-it-means-to-do-or-be-something”, is separable as reflectively reified in thinking, and, as such, separate from any individual master. It is common to, shared, and held in common by masters and apprentices through critical dialogue. When apprentices apprehend it, when they “get it”, they develop into masters autonomously, without interventions.

Summary and conclusion

The common denominator for both forms of *epistêmê* in table 1, is that they are both non-interventionist and theory-directed. Neither one is practical in the sense of being *directed at* the generation of specific, singular actions of any kind. The second one, *theôria*, is action *based*, however, like grammar. Although it is *directed* towards developing *theôria* and general competence, it is necessarily developed from a *base* in acquired practical experience. *Theôria* is generated from within practice, training, exercise, and habituation. It emerges from the *habitus* engendered through accumulated practical experience (*empeiria*) as an articulation of its forms and patterns (sifting differences and similarities). Its primary source is *praxis*₁, but since *praxis*₁ is inherent in all the other ways of knowing as well, it includes all the action-based knowledge forms *khrêsis*, *poiêsis*, *praxis*, and even *theôrêsis* considered from the “inside” as activities or disciplines. The ways of knowing differ in their relationship to what is known, but the fact that there is a *praxis*-aspect internal to all, makes *praxis* more generalisable and universal. Each way of knowing has its *habitus* specific to its particular relation to what is known and to its particular structure of means and ends. Hence, transferring a *poiêsis habitus* or a *theôrêsis habitus* to a context requiring *praxis*, produces a certain *habitus*-invalidity, and similar difficulties appear in attempts at translating *theôrêsis* based knowledge into “actionable” knowledge¹⁰. But this appears to be exactly what modernist social science has done in emulating natural science uncritically (still living in its wake), and in mistaking technique for *praxis*.

*Praxis*₂ and *phrônêsis* as practical reasoning are both action-based and action-directed, then, and so are the intermediate knowledge forms in the table (except *páthos*). Praxis regulates relations among some “us” having an equal and collegial relationship to standards of conduct that some “we” have in common. But in human relations both *theôrêsis* and the other intermediate forms regulate relations between some “us” as knowers and some outsiders

¹⁰ Cf. Eikeland & Nicolini (2011) for how most of the so-called practical turn in organisation studies is still only (qualitative) *theôrêsis* knowledge producing a host of validity challenges.

known, objectified as “the others”. The known is separate from the knower(s). In a way, *theôrêsis* creates and requires total ideal apartheid. Where we cannot communicate or interact with whatever we study, as with stars and planets, this may be the only possibility. But reducing social knowledge to this form is unnecessary, artificial, and highly problematic.

While current mainstream social research has mostly abandoned experimentation, action research springs historically from experimental psychology and social research. But although mostly modelled on *poiêsis*, experimentation does not have to be *poiêsis*. It could be either *khêsis* or *praxis*, and it could be qualitative and concept-generating rather than conventionally measuring and hypothesis-testing (Wartofsky, 1968; Dingler, 1952). In addition, a *praxis*-based experiment would not be based on manipulating others (organisations, communities, families, individuals, etc.) by applying material and efficient causes to them as treatments. It would be based on experimenting, trying things out, together, developing, perfecting, and articulating common practical patterns and forms, collective, interactive, and individual, thereby transforming organisational and social research from *theôrêsis*, and from *poiêsis-tékhnê*, to *praxis-theôria* constituting the basis for operational, practicable knowledge. *Praxis* requires sharing and communicating minds in a dynamic community of masters and apprentices. Everyone thereby becomes an experimenter, not an “experimentee”.

This whole perspective, then, is what I claim becomes conceptually concealed, excluded, obscured, and even distorted when talking too much about action research as “interventions” and “applied research”. The development of *praxis* and *theôria* cannot be reduced to this. This aim is even insufficiently served by quasi-essentialising action research as a “collaborative” or “interactive” relationship between researchers and practitioners within a division of labour where the contributions from both researchers and practitioners are unanalysed as to forms of knowledge and ways of knowing provided. As I started by writing, none of these activities or relationships is bad in itself. And, probably, none can be completely avoided or abandoned. They are all institutionally necessary for different purposes and occasions, and unanalysed mixtures abound. But although ways of collaborating can be *praxis*-based, normally these standard ways of speaking do not adequately

capture the potentials for *praxis* and *theória* as long as they operate with insiders and outsiders in a division of labour. Native, practitioner research opens the door for *praxis* research although it is often reduced (at least terminologically) to the implementation of conventional research by practitioners and insiders in work-places and organisations. Describing action research as interventions should be related and maybe even restricted to *poiêsis* and *tékhnê*, applying efficient causes to individuals, families, and organisations and even whole societies. Large scale political measures based on established and conventional economic science and on experimental and quasi-experimental behavioural science attempt this by applying causes, trying to stimulate or discourage certain kinds of behaviour in certain directions. Sometimes such measures even “work” according to their own intentions! But action research should not be reduced to this, and action research needs to be clearer about how it differs and how it aims to produce different kinds of knowledge.

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